Borrans Park, Ambleside
Cumbria

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The fieldwork was undertaken and the report compiled by Vix Hughes, the finds were examined by Sean McPhillips and Dan Elsworth (flints), and the drawings were compiled by Adam Parsons. A brief assessment was undertaken of the slag by Gerry McDonnell (Bradford University). The overall project was managed by Jamie Quartermaine who, with Carol Allen, also edited the report.

SUMMARY

An archaeological investigation was carried out by Oxford Archaeology North (OA North), on behalf of the National Trust, in August 2002, as a mitigation response to a service trench which was excavated, without archaeological supervision, on National Trust land. The land lies in the grounds of Borrans Park residential house and forms part of the *vicus* around the Roman fort at Ambleside, known as Galava, (NGR NY 374 037), and is within a scheduled monument (SM 13567). The investigation involved the examination of two exposed ends of a partially backfilled service trench and two small trial pits.

The main trench was aligned east/west and measured approximately 75m in length 1.2m in width and had a maximum depth of 0.8m. The western end of this trench was referred to as Trench 1, the eastern end as Trench 2, the total length of trench examined in the main trench was 9.5m. Trench 3 was located just north of Trench 1 and Trench 4 was just north and west of Trench 2. The results from Trenches 2, 3 and 4 were minimal revealing the remains of a previous backfilled service trench and natural deposits. In contrast Trench 1 revealed as series of deposits of confirmed Roman date. These deposits included the remains of a possible metal working structure, associated with rake out material derived from fuel combustion, possible surfaces and numerous layers.

Unstratified finds evidence from the spoil heaps produced during the digging of the service trench revealed the presence of a large amount of mainly second century Roman pottery, and further samples of metal working residues. The slag was subject to brief analysis which suggested that it was a product of secondary working (smithing).

The results confirm that the area adjacent to the A5075 was within the extra-mural settlement of the Galava Roman fort, and demonstrated secondary iron working activity on site or in the immediate vicinity.

Due to the obvious archaeological potential of the locations with the area of the Roman *vicus* of Galeva Roman fort it is recommended that any further ground works should be subject to a continuous archaeological watching brief and that these should be undertaken only within the controls of Scheduled Monument Consent.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

1.1.1 The proposed site of a house conversion at Borrans Park, Borrans Road, Ambleside in Cumbria (centred NGR NY 374 037), is within the area of the *vicus* associated with the Roman fort of Galeva. It is also within the Scheduled Monument of Ambleside Roman fort, its associated *vicus* and Roman road (SM 13567). The conversion of the house into several retirement flats involved the excavation of a linear service trench to provide further connections between the property and the main services which run along the roadside. The area of the works has considerable archaeological potential and, since the site was scheduled, the site was in theory protected from ground disturbance. In the event, however, the groundworks were carried out without Scheduled Monument Consent and without archaeological supervision.

1.1.2 Once the oversight was discovered the National Trust's North West regions archaeologist, Robert Maxwell, in conjunction with recommendations from Andrew Davison, English Heritage Inspector of Ancient Monuments, commissioned Oxford Archaeology North (OA North) to record the remaining exposed sections. The work was carried out, in accordance with a short written brief (*Appendix 1*), over two days at the start of August 2002.

2. METHODOLOGY

2.1 SITE INVESTIGATION

2.1.1 A watching brief was maintained following the excavation of a service trench. The trench was mechanically excavated prior to the archaeological investigation. A programme of field observation accurately recorded the location, extent, and character of any surviving archaeological features within the ground work's. The exposed sections were recorded using the standard OA North methods which accord with those recommended by English Heritage's Centre for Archaeology (CfA). Recording was in the form of *pro forma* Context Sheets for each of the features and/or deposits identified, together with accompanying hand drawn sections, at a scale of 1:10. A photographic record, using both black and white and colour slide formats, was maintained and the finds recovered were bagged and recorded by context. The trenches were located by taped offsets from mapped field boundaries. A plan was produced of the areas of groundworks showing the location and extent of the ground disturbance (Fig 2). In addition, the three spoil heaps were systematically examined by firstly visual inspection then by digging over what equated to approximately one eighth of the volume.

2.2 FINDS

2.2.1 All finds were treated in accordance with standard OA North practice. Analysis of the pottery was based solely on visual inspection of individual sherds, and has been described using the terminology developed by Orton *et al* (1993). A catalogue of the artefacts have been included in *Appendix 3* in Object Reference Number order.

2.3 ARCHIVE

2.3.1 A full archive of the work has been produced to a professional standard in accordance with current English Heritage guidelines (Management of Archaeological Projects, 2nd edition, 1991) and the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (UKIC 1990). The paper archive will be deposited with the County Record Office (Kendal) and the material archive with the Kendal Museum. In addition, a copy of the report will be forwarded to the County Sites and Monuments Record (SMR) and a summary sent to the National Monuments Record (NMR).

3. BACKGROUND

3.1 TOPOGRAPHIC AND GEOLOGICAL BACKGROUND

3.1.1 The site lies near the head of Lake Windermere (NY 372 033) on the outskirts of present-day Ambleside and just east of the A5075 (Fig 1). Here, the overlying drift comprises fluvial clays, sands and silts within the area at the head of the lake, above a solid geology of Ordovician volcanic tuffs, with small areas of extrusive rhyolite and andesite lavas, dating mostly from between 440 and 500 million years ago (Geological Survey 1978). The brown alluvial overlying soils are of the Alun Series.

3.2 HISTORICAL BACKGROUND

3.2.1 The Roman fort at Ambleside formed part of the network of forts occupying the North West. The fort was first recorded in the seventeenth century by William Camden (1610) (relating to a description by Sir Daniel Fleming of Rydal). The fort was subject to four seasons of excavation by RG Collingwood (Haverfield and Collingwood 1914, Collingwood 1915; 1916; 1921), and by Lancaster University Archaeological Unit in 1988 and 1989 (LUAU forthcoming) (Fig 2). These excavations revealed that the upstanding fort probably had a second century Hadrianic foundation date, but was preceded by a first century turf and timber construction, possibly of late Flavian date. Collingwood also established the existence of extramural activity, which has been defined to the east and north of the fort (NY 373 036), where numerous find-spots and some limited excavation have begun to define its chronology, status and function (summarised in Leech 1993). This activity seems to be focused along the Roman roads leading north and east from the fort.

3.2.2 The construction of a sewage works in 1900 revealed the 'corduroy' impressions of the remains of a wooden roadway 500 yards to the north of the fort and traces of another road outside its north-eastern corner (Cowper 1902). Excavations undertaken to the west of Borrans Road in 1920 revealed remains of a road flanked by an extensive area of 'floor levels' associated with second to third century pottery (Collingwood 1921) (Fig 2). Excavations to the east of Borrans Road, to the south of the study area, undertaken in 1963 revealed buildings and occupation debris associated with first and second century pottery (Burkett 1965). To the north-west of the study area, also on the eastern side of Borrans Road, a cremation jar, dating to *c*AD 80-130, was found (*ibid*). Further funerary remains were also recorded further to the west during work in 1976 (Burkett 1977).

3.2.3 Since 1968 a further eight archaeological projects have been undertaken in the area of Borrans Road, to the north and east of the Roman fort (Fig 2). These were undertaken for the most part by Lancaster University Archaeological Unit (LUAU) but also by the Centre for Field Archaeology of Edinburgh University (CFA), and by M Burkett (1977) (Fig 2). In 1968 a rescue excavation was undertaken in the area of Borrans Road which identified a stone structure with a possible hypocaust in an area immediately adjacent to the present Rugby Football Club house (Burkett 1977). In 1982 excavations and a watching brief were undertaken along the line of Borrans Road, examining the section of road adjacent to the Rugby Club (Leech 1993) (1982

Excavation Fig 2). In 1985 an evaluation was undertaken on a parcel of land to the north of Galava Gate (Dyson 1985). In 1990 LUAU undertook an evaluation along the route of a proposed link road from Waterhead to Rothay Road (RT1-11, Fig 2), east of the known limit of the extramural settlement (Tostevin and Neil 1990), and in 1991 a desk-top study and evaluation was undertaken by LUAU along the various proposed routes of the Ambleside by-pass (Ely 1991). Three excavations and watching briefs were conducted by LUAU and CFA along Borrans Road, north and south of Galava Gate both in 1991 (Fig 2, Borrans Road 1991 - S2, S5, S16, S19 and S22) and in 1992/3 (Fig 2, ST1-5). These effectively produced an archaeological transect through the extramural settlement (Dunwell and Alexander 1993; Dunwell *et al* 1993; Godbert 1993).

3.2.4 An assimilation of the results of all the evaluations was produced by LUAU on behalf of English Heritage (Quartermaine and Dunwell 1994) which was required to assess the evidence for the location, chronology and development of the *vicus*. This established that the extramural settlement extended only a little way to the east of Borrans Road, but extended north following that road at least as far as the northern edge of the rugby club. The chronology of the *vicus* has been established as extending between the Flavian and Antonine periods, which broadly corresponds with the known occupation of the forts. The assessment has established the considerable archaeological sensitivity of the area and the survival of archaeological deposits adjacent to Borrans Road.

3.2.5 It has long been assumed that this settlement lay in an area of damp, if not marshy, land (Cowper 1902, 35). To this day the ground is often waterlogged, as observed during this excavation, and the extensive preservation organic remains of the Roman period observed during other excavations, testifies that this has been the case for the intervening two millennia. There are accounts (cited by Burkett 1965, 92) of previous discoveries of subterranean 'Roman drains', to the east of the fort; whilst these are unconfirmed by archaeological observation, and may well have been largely destroyed by the construction of the houses east of Borrans Road, drainage of the land around the fort in the Roman period can be envisaged as desirable, if not essential. The waterlogged state of the ground may have enabled the preservation of organic material which would be of considerable archaeological value and reinforces the significance of the site.

4. RESULTS

4.1 INTRODUCTION

4.1.2 The location of the excavated trenches is shown in Fig 3. The main trench ran from a raised area, bordered by an iron rail fence in front of the house, westwards to the A5075. Generalised trench descriptions are given below (*Section 4.2*) and a list of the contexts assigned in the course of the evaluation are presented in *Appendix 2*. The drawings of the exposed sections in the western end of the main trench (Trench 1) are presented as Fig 4. A general view of the location is provided in Plate 1.

4.2 TRENCH 1

4.2.1 The main trench was mechanically excavated prior to the present archaeological investigation and was aligned east/west; it was *c*75m long, 1.2m wide and had a maximum depth of 0.8m. The western end of this trench was defined as Trench 1, the eastern end as Trench 2. The western Trench 1 was 7.0m in length; at the extreme western end, by the field wall separating the Borrans Park property from the roadside, the trench was 0.8m deep and at the eastern end it was 0.6m deep. The western end of Trench 1 had been disturbed by construction of foundations for a sign and existing services (Plate 2).

4.2.2 The earliest deposit in this part of the main trench was a pale, buff coloured, gravely sand, ***120***, which was sterile of finds and appeared to be the natural subsoil. It was visible in the centre of the trench, where it occurred at a depth of 0.6m and at the western end, where it was at a depth of 0.45m. From examination of the same deposits in other exposed trenches it was possible to confirm that this was indeed a natural subsoil.

4.2.3 At the western end of the trench the natural subsoil, ***120,*** was cut by a possible pit feature, ***128***. In both sections the feature was somewhat disturbed by a recent service trench, ***125,*** which obscured the edges significantly. In the north facing section the pit was slightly more obvious and the cut, ***128***, although not entirely evident, appeared to have moderately sloping sides with a possible concave base and gradual break of slope at the top, but which was imperceptible at the base. In the south facing section less of the feature was revealed, but it was in a similar location and was probably the same (defined as ***135***). The lower fill, ***127***/***134***, was *c*0.2m thick and composed of a mid-grey sandy matrix with frequent inclusions of small sub-rounded stones. There was also a considerable amount of slag-like material which was sampled. Above this, the upper fill, ***126***/***133***, was a mid-grey sandy silt of about 0.25m thickness. The pit may originally have been a hole dug to discard waste material from (probably) secondary iron working. The presence of the same feature in both sections would indicate that it had overall dimensions of at least 1.3m by 1.2m. The feature was sealed by layer ***101***.

4.2.4 Overlying the natural deposit ***120***, in the centre of the trench, was a 0.15m thick layer of pale-grey gravelly sand, ***119***, which appeared to be thinning towards the eastern end of the trench. In this central part of the section, there was a sequence of layers which were disturbed by more recent features to the east and west. The

sequence did not continue beyond these intrusions and it is suggested that there may have been some form of vertical interface which has been obliterated.

4.2.5 Above ***119*** was the edge of a small layer, ***113***, which was only visible for a distance of 0.25m, before being cut by intrusive feature ***103***, but this continued to the east of the intrusion, as was evident in the south facing section. Overall the layer must have extended across the trench, for over 1.2m and in the southern section was visible for over 3m. The layer was a soft-grey humic silt with very frequent inclusions of charcoal and had a maximum depth of 0.2m; it was markedly darker in the north facing section than in the south facing section. It would appear that the layer contains the remains of wood and other organic materials burnt as fuel, and that the deposit may have been 'raked out' from a nearby feature, such as a furnace or hearth, after a period of use. The difference in colour shading between the north and south sides of the trench, probably relates to the charcoal content, which would appear to be decreasing towards the north side. It could imply that the main focus of the feature was towards the south. A sample of the deposit was taken.

4.2.6 Overlying deposit ***113*** were a number of deposits, ***111***, ***118*** and ***130,*** and a possible cut feature ***132***. Of these ***130*** was a thin layer seen only in the south-facing section, which was 1.2m in length and 0.08m in thickness. It was a mid-orange silt and was possibly a small dump of material, it may potentially have been deliberately laid to seal the layer of 'rake out' and provide a surface over the softer charcoal rich deposit.

4.2.7 At the extreme eastern end of Trench 1, in the north facing section, was a small section of layer ***112*** which, in the south facing section, was considerably more extensive, being over 3m in length and 0.15m in thickness. The layer is a soft, dark-grey, silty clay containing very occasional small stones. It is unclear how the layer formed or what its function was, but possibly was accumulated material from activity or occupation.

4.2.8 A small feature, ***132***, cut layer ***113*** but may also have truncated the later layer ***112***, as the relationship was not certain. The cut appeared to be symmetrical, with steep, near vertical, sides. The base was not revealed and the breaks of slope were indistinct. The feature was filled by ***131***, which was a dark-grey silt, containing approximately 10% small to medium sized sub-rounded stones.

4.2.9 Returning to the sequence in the central part of the trench, above layer ***113*** was also a very thin layer, ***118***, which was present for over 1.8m of the trench length and was a maximum of 0.04m thick. It was a black humic silt, containing charcoal flecks and probably related to burning in the near vicinity. It could be interpreted as a possible occupation horizon, resulting from charcoal rich material being trampled onto the ground around a feature such as a furnace or hearth. One sherd of second century greyware was obtained from this layer perhaps further suggestive of occupation and activity (*Section 4.6*).

4.2.10 Overlying ***118***, was a thicker layer of mid-grey silt, ***117***, which contained a small proportion of gravel sized material and occasional, very small charcoal fragments. It became thicker towards the eastern end of the trench, varying from 0.1m to 0.2m over a distance of 0.9m. The origin and function of the layer are unclear but it may have been accumulated rather than dumped. It contained one sherd of samian pottery, probably dating to the Antonine period (*Section 4.6*). Above this was

another thin band of material, again black and charcoal rich, ***116***, which extended over the same area as the previous deposits and probably had a similar origin as that of the earlier layer ***118***.

4.2.11 A second thin layer, ***115***, overlying ***116***, was remarkably different, being a dark-orange band of sand, only 0.06m thick. It was possibly deliberately laid to act as a floor or surface, although not a very substantial one, and may form part of a succession of alternating deposits of trampled occupation material and sandy spreads acting as temporary floors/surfaces. Over this putative floor was a thicker layer of dark-grey clayey silt, ***114***, which was 0.1m thick and at the interface of this layer and the one directly above, ***101***, was a large piece of tile or brick; this was too large to remove without damaging the section and was relatively undiagnostic in form. This layer may have been formed from occupation activity but this is unclear since the deposit was only seen in the north facing section.

4.2.12 Truncating this sequence of layers was a later feature, ***124***, which was *c*0.75m wide and 0.25m deep, symmetrical in profile and formed a broad 'U' shape. It appeared to have three fills, the lowest was a pale-grey gravely sand about 0.04m thick, ***123***. Above this was a pale-orange clayey silt, ***122***, and at the uppermost was a distinct grey deposit with approximately 80% small (< 0.05m diameter) stones, ***121***. The purpose of this cut feature is obscure since it was only seen in section and may originally have been more extensive than that surviving. It did not extend across the entire width of the trench as it did not appear in the south facing section. A tentative suggestion may be that it was the remains of a structure; it had not been affected by heat and is unlikely to have been a hearth or furnace. The relatively narrow width of the feature may correspond to something along the line of a wall, or the foundation for an upright superstructure, the gravely nature of the uppermost surviving fill could have provided a stable base for a wooden structure. Sealing this feature was layer ***101*** (*Section 4.2.15*)

4.2.13 Towards the eastern end of Trench 1 was a slightly different sequence, bordered by two intrusive features. Continuing the sequence post-dating layer ***113*** in this area, was a gritty dark-grey, silty clay, ***111***, which was visible for a length of 0.5m and was over 0.15m thick. The dark colouring was probably a result of either being mixed with charcoal rich material or had been influenced by percolation from above of such sediments.

4.2.14 Above ***111*** was an alternating sequence of 0.1m thick layer of pale-greyish-yellow, silty sand, ***110***; a thin band of dark-grey clayey silt, ***109***; another layer of pale greyish-yellow silty sand; followed by a second, later band of dark grey clayey silt, ***108***; and finally a layer of pale-greyish-yellow clayey silt, ***107***. The interpretation of these layers was difficult, as very little was available for perusal but it is suggested that they may represent occupation deposits, the darker bands being organic debris and the paler, thicker bands being generally accumulated sediments mixed with material laid as surfaces. Sealing these deposits was layer ***101*** *(Section 4.2.15)*.

4.2.15 Layer ***101*** was present the full length of Trench 1 and overlay deposits: ***112***, ***121***, ***106*** and ***126*** / ***133***. It varied in thickness from 0.15m to 0.2m and was a dark-brown clayey silt, containing a small number of medium sized, sub-angular stones, randomly deposited, as well as a small proportion of roots which penetrated from the layer above, ***100***.

4.2.16 At the top of the sequence was layer ***100***, a dark-black-brown silty, sandy clay (loam) which comprised the turf and topsoil layer extending across the field and was seen in all trenches.

4.3 TRENCH 2

4.3.1 The eastern end of the main east/west aligned trench was referred to as Trench 2 and measured *c*2.5m in length, 1.2m in width and had a maximum depth of 0.7m. This end of the trench was located by a low wall topped by railings, to the west of the building forecourt.

4.3.2 The stratigraphic sequence observed in the north and south facing sections of Trench 2 were straightforward and identical. All the deposits were sterile of any finds and were interpreted as being of natural origin, probably derived from post-glacial or possibly fluvial activity. The earliest deposit was ***203,*** a layer over 0.12m thick, and composed of dark-orange sandy silt, with a small proportion of clay mixed throughout and approximately 20% of small sub-angular stones. Overlying this was, ***202***, a 0.2m thick mid-brown, clayey silt, containing 10% root matter and 15% small to medium sized sub-angular stones. Above this was ***201***, also 0.2m thick, and composed of a mid-orangey-brown clayey silt, with about 20% small sub-angular stones. At the top of the sequence was the same dark-brown topsoil seen in Trench 1, ***200***.

4.4 TRENCH 3

4.4.1 A small trial hole was hand excavated by the contractor and was intended to locate the previous service alignment which runs, almost parallel to Trenches 1 and 2, across the field to the north. Trench 3 was located approximately 3m from the field wall by the roadside and 1m north of Trench 1. The trench was 0.8m in length, 0.7m in width, aligned north-west/south-east and had a maximum depth of 0.7m. The stratigraphy in such a small hole was relatively complex, more so because of the size, but it was essentially a product of recent activity.

4.4.2 The earliest deposit was a buff coloured stony/gravelly layer, ***307***, over 0.1m thick, and similar to ***120*** seen in Trench 1, which was interpreted as of natural origin. The similarity, proximity and archaeological sterility of layer ***307***, suggests that it, too, was natural in origin.

4.4.3 Overlying the natural subsoil, ***307***, was a 0.2m thick deposit of dark-brownish-grey silt, ***306,*** and above that a second deposit, also 0.2m thick, of pale to mid-grey silt, ***305***. It is likely that these two deposits were part of more extensive layers but the limited observations did not provide any information as to their origin or function. What was clear was that truncating these deposits was a cut, ***304***. This was only partially exposed but appeared to be aligned south-west/north-east, extending across almost all of Trench 3; only the north-west corner, where deposits ***305-307*** were seen, was not part of the cut feature. Cut ***304*** had near vertical sides with a sharp break of slope at the top, the overall profile and base were not visible as it extended beyond Trench 3; the cut was 0.55m deep and filled by three deposits, all of which were deliberate backfills. At the base of the trench was a pale-brown clayey silt, ***303***, above which was ***302,*** a mixed mid-brown clayey silt and at the top was ***301,*** a

dark-greyish-brown clayey silt. At the very base of the trench, within deposit ***303,*** was a metal stopcock; the fills and cut are the remains of the previous service trench running across the field.

4.4.5 Sealing the top backfill of the service trench was deposit **300**, which was the same as ***100*** and ***200*** and comprised the turf and topsoil layer, 0.15m thick.

4.5 TRENCH 4

4.5.1 Trench 4 was a further trial excavation, which was hand excavated to locate the previous service trench; it was located *c*8m north of Trench 2, and 5m west of the low rail surmounted wall in front of the main house. The trench was 1.5m in length, 1.4m in width, aligned roughly north-west/south-east and had a maximum depth of 0.4m. Only three sections were investigated since the fourth, facing north-west, was completely covered in spoil.

4.5.2 The earliest deposits in the trench were all probably natural in origin although there were variations from the deposits seen in nearby Trench 2. The earliest deposit seen was a mid-grey clayey silt, with a fine texture, ***403***, which was visible at the very base of the south-west facing section, but was only observed for a depth of 0.03m and was presumably deeper.

4.5.3 Above this was a 0.2m thick layer of mid-orangey-brown clayey silt, with frequent sub-angular stones, ***402***; this was almost identical to ***201***, which was identified as a natural geological deposit in Trench 2. Overlying this was a highly stony, brown clayey silt layer, ***401***, which was approximately 0.05m thick. Both these deposits were present in all three sections and none produced any evidence of anthropogenic activity.

4.5.4 Truncating these deposits was a continuation of the south-west/north-east aligned, service trench seen in Trench 3. The cut, ***405***, was vertical sided and measured 0.8m in width and over 0.3m in depth; it was filled by a highly mixed deposit, ***404***, which contained a small proportion of unsorted and variably sized stone inclusions. At the top of the sequence in this trench was the topsoil, ***400***, identical to the topsoil seen in the other three trenches.

4.6 FINDS

4.6.1 ***Introduction:*** the finds were derived almost entirely from the systematic examination of the spoil heaps; the finds from each spoil heap were kept separate in order to provide some control over their provenance. Examination of the spoil heaps revealed that only that associated with Trench 1 (Tr1S) and the extraneous spoil heap (XTS) produced any finds (Fig 3). A moderate assemblage of artefacts was retrieved in the course of the project, comprising 59 fragments in all. In general, the material was in poor condition, and many fragments were clearly quite abraded, having been recovered from disturbed deposits. The majority of the assemblage was ceramic vessels, although there was also a significant amount of metal-working residues, some adhering to fired clay hearth lining. Other material classes were represented by; daub, burnt stone, flint and clay pipe. A summary finds catalogue is included as *Appendix 3*.

4.6.2 ***Pottery:*** the pottery assemblage comprised 37 sherds, of which 33 were of Roman date, and four were from the post medieval period. Some of the earlier material was abraded, and the later sherds also showed some surface erosion. The fragment size varied considerably, although the breaks were not unduly worn, suggesting that they had not been subject to either excessive disturbance or redeposition.

4.6.3 ***Roman:*** the finewares include 18 sherds of samian comprising decorated and plain forms, representing small bowls and dishes, mainly manufactured at Lezoux, Central Gaul.

4.6.4 The coarsewares comprised four fragments of locally made oxidised wares, six fragments of reduced greywares of unknown origin (but also likely to be of local manufacture), four sherds of Black Burnished Ware 1, and six sherd of oxidised buff wares. The range of fabrics and vessels suggests a date range centred in the mid to late second century AD. The remaining fabrics identified include four body sherds of Dressel 20, Spanish amphora.

4.6.5 Although the majority of the coarsewares locally produced, the presence of Black Burnished Ware, along with amphora, and the fact that samian comprised more than half of this small group, strongly suggests a close relationship with the military supply network, at least during the main lifetime of the fort, which probably had a much reduced garrison from the late second or early third century, but might have remained in occupation until the fourth century.

4.6.6 ***Post medieval***: the post-medieval assemblage comprised black glazed, red earthenware, white earthenware and Mottled ware. The material derives from the common domestic types typical of north-western England in the late eighteenth and nineteenth centuries.

4.6.7 ***Flint:*** two pieces of flint, recovered from the spoil heaps, are both worked and appear to have been used as tools. The forms are comparable with Mesolithic flints from sites such as Deepcar, Yorkshire and Morton Tay, Fife (Megaw and Simpson 1979). One of these (1021) may be a retouched blade, while the second object may be a damaged scraper (1022). A single flint core-trimming flake of a similar date was recovered during the pipeline excavations along Borrans road in 1968 (Persall and Pennington 1989, 197; Burkett 1977).

4.6.8 ***Industrial Residue:*** a few fragments of iron-working slag were recovered from the Tr1S and the XTS spoil heaps, and there were also fragments of fired clay furnace lining, with slag attached, and also an irregular shaped flat tile with metallic residue fused on its surface. The stone was probably also associated with the iron working, and may have served as a heat retainer or structural component of a furnace.

4.6.9 Two samples of slag from the spoil heap adjacent to Trench 1 (Tr1S) were submitted to G McDonnell (Bradford University) for analysis. The first was a fragment of burnt clay, with vitrified ferrous lining; there was no evidence of any non-ferrous material associated with it. The other was a fragment of ferrous slag. From visual inspection, neither of the samples compared with the tap slag that typically characterises Roman iron smelting (primary working), and the slag was consistent with smithing (secondary working). The burnt clay fragment would appear to be, therefore, a fragment of smithing hearth bottom.

4.6.10 ***Other Materials:*** four lumps of daub, probably was probably derived from a wattle and daub wall or other structure were recovered; these are undated. There was also a single fragment of stem from a nineteenth century tobacco pipe from Trench 1 spoil heap (Tr1S).

5. DISCUSSION

5.1 THE SITE

5.1.1 The evaluation produced evidence of Roman activity associated with the *vicus*, which, in this location, lies to the east of the established well preserved Roman road running north from the fort (Drury and Dunwell forthcoming). Trench 1 produced the only significant remains; they were of considerable complexity and possibly reflects the proximity of the trench to the Roman road seen in 1991 (*ibid*). These remains included a series of sequential deposits which relate to the occupation of the area and were potentially a series of floors and accumulated debris, ***114-119***. Finds included four different types of amphora, indicating the transportation of containers which may have been reused as flooring material.

5.1.2 Evidence of deposits containing burnt material was found which, considering the finds of what appear to be smithing hearth lining (*Section 4.6.9*), could be rake out deposits, either from a furnace or from nearby hearths, as well as material trampled onto working surfaces or floors. These appear to date from the second century (*Section 4.6.4*). At some later stage a structural feature, possible a wall, was put in place but the paucity of information means the interpretation can only be tentative, ***124***.

5.1.3 There was also a pit continuing slag and other debris again relating to iron working. Similar metal working evidence, including eight fragments of iron and seven of bloomery slag, were recovered from the subsoil during work at Netherbeck, to the south, in 1994 (Quartermaine and Dunwell 1994). In addition the watching brief carried out in 1991, while a pipeline was inserted north/south along Borrans Road, demonstrated that the adjacent field to the south, was an extensive area of industrial activity which seemed to be associated with individual plots, albeit being part of a single complex (Drury 1991). The present investigation suggests that this industrial activity extended north of the east/west road and as far as Trench 1. Such levels of industrial activity are not unknown from *vicii* throughout the North West.

5.1.3 The location of Galava fort on the north edge of Lake Windermere would have allowed transport of both raw materials and manufactured objects by boat, a far faster and cheaper method of transportation than overland, and would have encouraged industrial activity.

6. IMPACT AND RECOMMENDATIONS

6.1 IMPACT

6.1.1 The service trench has disturbed significant Roman deposits, the remains of which could only be investigated at the western end, have been shown to be in good condition and well preserved. The investigation highlighted the important archaeological potential of the study area, confirming that the location of the proposed development was part of the *vicus* settlement associated with the Roman fort. The results of the work showed the examined area to contain archaeological features related to the *vicus* and a possible metal working area. The amount of Romano-British material retrieved is indicative of the evaluation area having been intensively used during the Romano-British period.

6.2 RECOMMENDATIONS

6.2.1 It is recommended that any further ground works within Borrans Park be of limited extent and should be subject to a continuous presence archaeological watching brief. Any ground works should be undertaken only within the strict controls of Scheduled Monument Consent.

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APPENDIX 1
OUTLINE PROJECT BRIEF

Recording Requirements

- Cleaning up and recording (section drawing and written record) of sections – four sections, (2 at each end of trench) of c. 3-4m x 1m.
- Photographic recording of sections.
- Cleaning and recording of small hand dug holes – section drawings may not be possible.
- Recording locations of trench and hand dug holes in relation to field boundaries and other features (hand taped off sites may be as efficient as EDM survey given the simple nature of the site).

Spoil Examination

- There is a requirement to carefully examine the surviving spoil prior to backfilling or removal from the site (Roman material has been found within it already). Logistically this may be complicated because of the volumes involved.

Report

- A simple description and interpretation of the recorded information, including the section drawings and their locations.
- A basic assessment of the finds – identification of spot dates; more detail only for significant finds.
- Conclusions.

APPENDIX 2
CONTEXT LIST

Context No.	Trench	Description	Above	Below
100	1	Topsoil, dark blackish brown		
101	1	Subsoil, dark brown	106 112 121 126 133	105
102	1	Fill of 103, dark brown, mixed	103	
103	1	Cut	104 125 129	102
104	1	Fill of 105, dark grey	105	103
105	1	Cut	101	104
106	1	Layer, pale greyish yellow clayey silt	107	101
107	1	Layer, dark grey clayey silt	108	106
108	1	Layer, pale greyish yellow silty sand	109	107
109	1	Layer, dark grey clayey silt	110	108
110	1	Layer, pale greyish yellow silty sand	111	109
111	1	Layer, dark grey clayey silt	113	110
112	1	Layer, soft, very dark grey silty clay	130	101
113	1	Layer, soft, dark grey, charcoal rich: Rake Out	119	111 118 130 132
114	1	Layer, dark grey silty clay	115	124
115	1	Layer, dark orange sand band	116	114
116	1	Layer, black, charcoal rich burnt deposit	117	115
117	1	Layer, mid grey gravely silt	118	116
118	1	Layer, black clayey silt, burnt organics ?	113	117
119	1	Layer, pale grey gravely sand	120	113
120	1	Natural, buff gravely sand, geological drift	l.o.e.	119, 128, 135
121	1	Fill of 124, grey, 85% rounded gravel, Foundation Bedding ?	122	101
122	1	Fill of 124, pale orange clayey silt	123	121
123	1	Fill of 124, pale grey gravely sand	124	122
124	1	Cut, Linear Structure ?	114	123
125	1	Modern Service Intrusion, probably 1991	101	103
126	1	Fill of 128, upper, mid grey sandy silt	127	101
127	1	Fill of 128, lower mid grey stoney sand,	128	126
128	1	Cut, possible Pit	120	127
129	1	Layer, mid grey stoney silt	103	101
130	1	Layer, mid orange clayey silt	113	112
131	1	Fill of 132, dark grey, boundaries indistinct	101 ?	132
132	1	Cut, small possible Pit	113	131
133	1	Fill of 135, same as 126	134	101
134	1	Fill of 135, same as 127	135	133

135	1	Cut, possible Pit, same as 128	120	134
200	2	Topsoil, dark blackish brown	201	-
201	2	Natural, mid orangey brown, geological drift	202	200
202	2	Natural, mid brown, geological drift	203	201
203	2	Natural, dark orange, geological drift	LOE	202
300	3	Topsoil, dark blackish brown	301	-
301	3	Fill of 304, dark brown stoney clayey silt	302	300
302	3	Fill of 304, mid brown	303	301
303	3	Fill of 304, pale brown	304	302
304	3	Cut, for water service trench	305	303
305	3	Layer, pale grey silt	306	304
306	3	Layer, dark brownish grey silt	307	305
307	3	Natural, buff gravely sand, geological drift		306
400	4	Topsoil, dark blackish brown	404	-
401	4	Layer, stoney brown sandy silt	402	405
402	4	Layer, mid orangey brown, geological drift	403	401
403	4	Layer, mid grey clayey silt	LOE	402
404	4	Fill of 405, mixed brown	405	400
405	4	Cut, for service trench	401	404

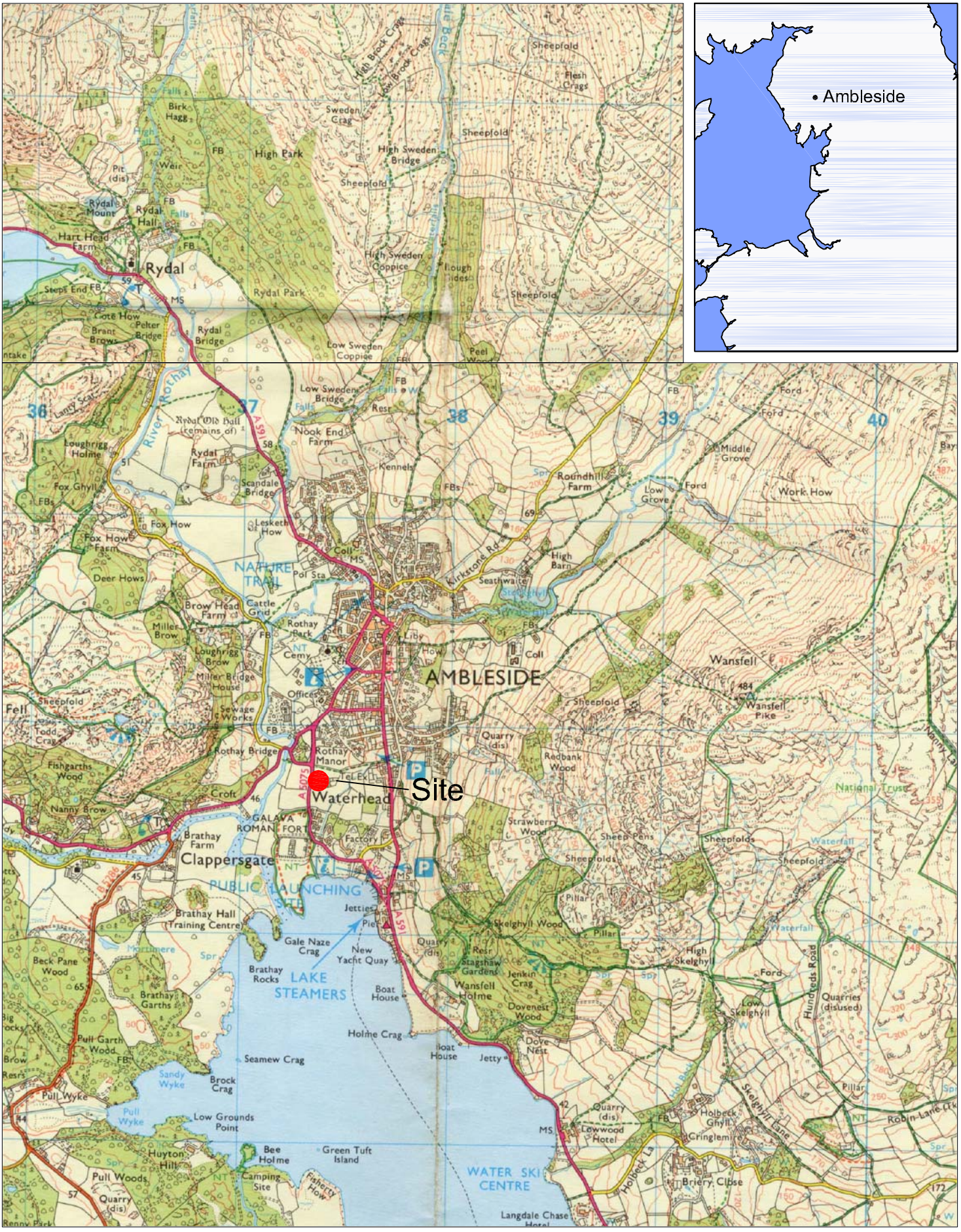
LOE = Limit Of Excavation

APPENDIX 3
FINDS CATALOGUE

Context	Object No	Material	Type	Quantity	Description	Date
113	1001	Ceramic	Vessel	1	Gritty oxidised ware.	Second century
117	1002	Ceramic	Vessel	1	Samian plain rim?	AD 160
118	1003	Ceramic	Vessel	1	Grey ware.	Second century
125	1004	Ceramic	Vessel	1	Green glazed rim.	Post-medieval
TR1S	1005	Ceramic	Vessel	3	Samian.	Second century
TR1S	1007	Ceramic	Vessel	1	Amphora.	First to third century
TR1S	1010	Ceramic	Vessel	10	Grey wares (2), Oxidised (3), Buff fabric(5).	Second century
TR1S	1012	Ceramic	Vessel	1	Glazed red earthenware.	Eighteenth/ nineteenth century
TR1S	1014	Stone		1	Possibly burnt, structural use?	Roman
TR1S	1020	Ceramic	Tobacco pipe	1	Stem fragment.	Post-medieval
TR1S	1021	Flint		1	Retouched blade (?), opaque toffee coloured.	Mesolithic
XTS	1006	Ceramic	Vessel	1	Samian?	Second century
XTS	1008	Ceramic	Vessel	1	Amphora.	First to third century
XTS	1009	Ceramic	Vessel	5	BB1(4), Grey ware.	Second century
XTS	1011	Ceramic	Vessel	3	Amphora, grey ware, partially reduced flagon.	Second century
XTS	1013	Ceramic	Vessel	3	Black glazed red earthenware, white earthenware, mottled ware.	Mid eighteenth to late nineteenth century
XTS	1015	Ceramic	Building material	1	Undiagnostic fragment.	Roman
XTS	1022	Flint		1	Scraper, damaged, translucent toffee coloured.	Mesolithic
XTS	1023	Bone	Animal	1	Burnt fragment.	
US	1016	Ceramic	Vessel	2	Samian, decorated.	Mid second century
US	1017	Ceramic	Vessel	1	Grey ware.	Second century
US	1018	Ceramic	Vessel	2	Amphora.	First to third century

US	1019	Ceramic	Building material	3	Undiagnostic fragment.	Roman
127	1024	Industrial debris		3	Iron smithing slag and hearth lining.	Roman
TR1S	1025	Industrial debris		1	Iron smithing slag and hearth lining.	Roman
TR1S	1026	Industrial debris	Metal-working residue	4	Iron smithing slag.	?Roman
XTS	1027	Metal Residue		3+	Iron slag	?Roman
US	1028	Metal Residue		1	Iron slag	?Roman
XTS	1029	Metal Residue		2	Iron slag	?Roman

ILLUSTRATIONS



based upon the Ordnance Survey 1:10000
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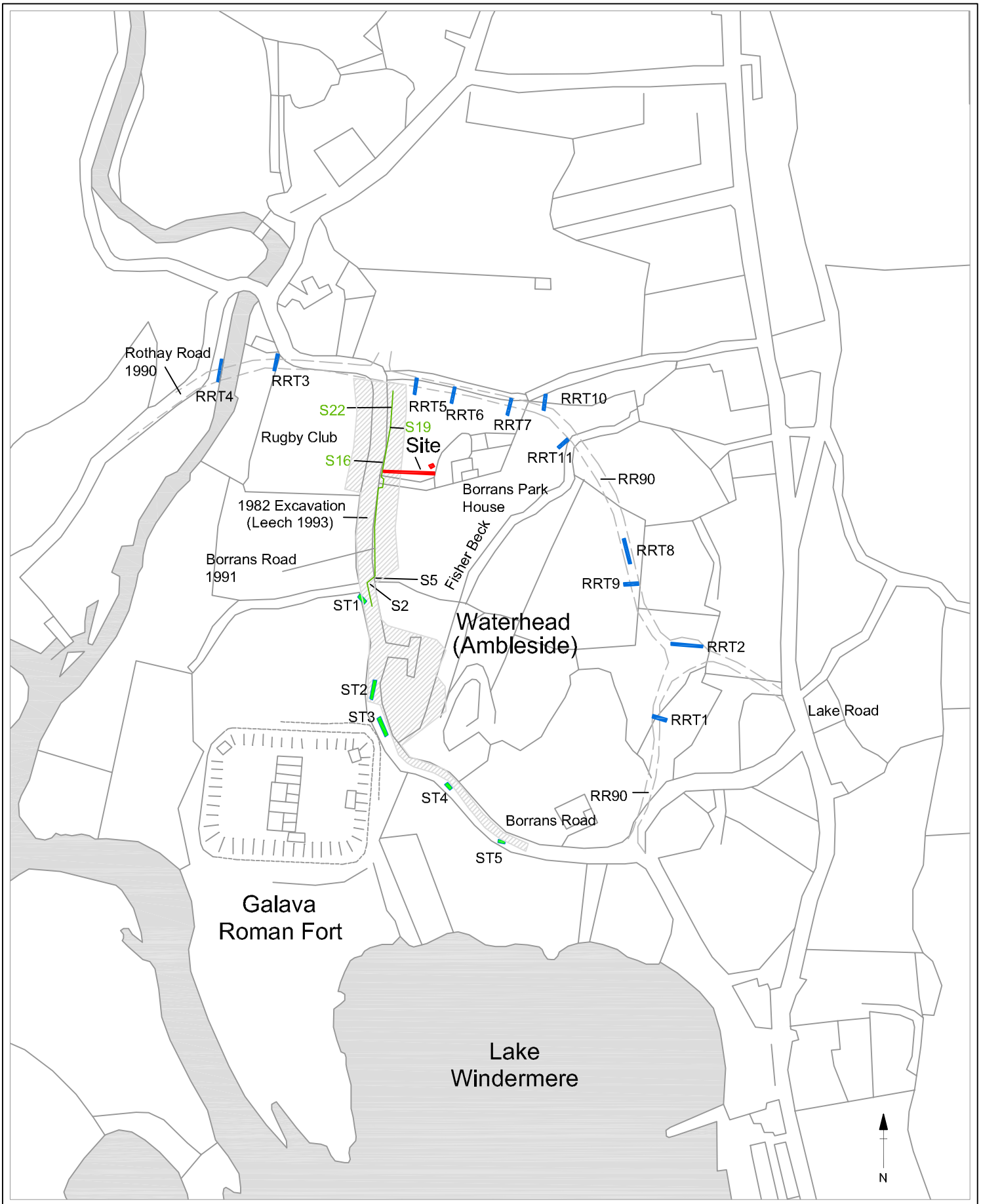
Figure 1: Site Location Map



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PROJECT:	Borrans Park, Ambleside
DRAWING No:	2
SCALE:	1:5000
TITLE:	Location of work in relation to previous excavations
CLIENT	The National Trust
DRAWN BY:	AJP
DATE:	October 2002

KEY

RRT1-11	Rothay Road evaluation 1990 Trenches 1-11
ST1-5	Ambleside Sewerage scheme 1992-3 - Trenches 1-5
S2	Borrans Road watching brief 1991, showing exposed sections (S2, S5, S16, S19 and S22)
	Extent of 1982 excavations
	Present Borran Park Site

Figure 2: Location of work in relation to previous recent excavations of the vicus

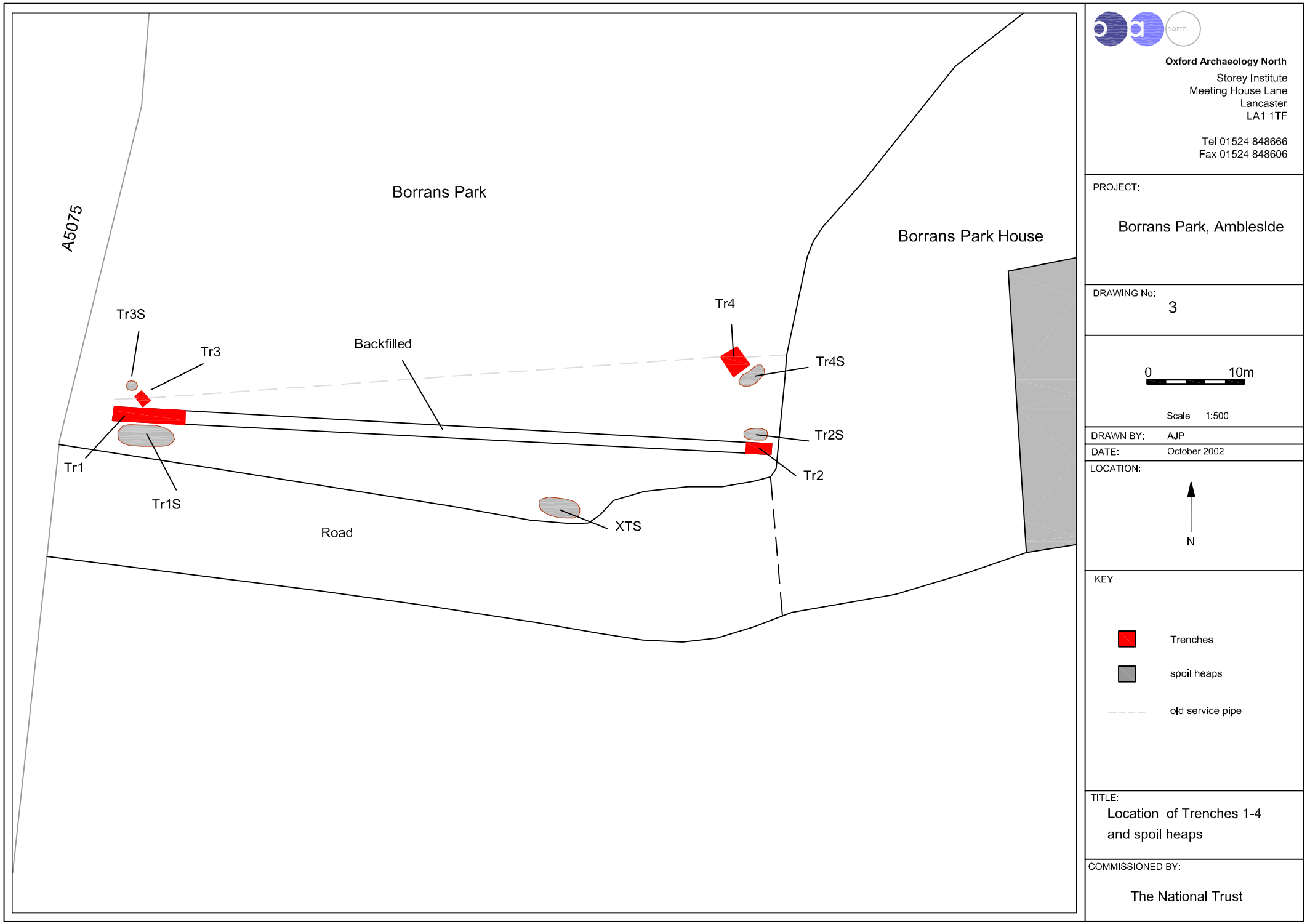
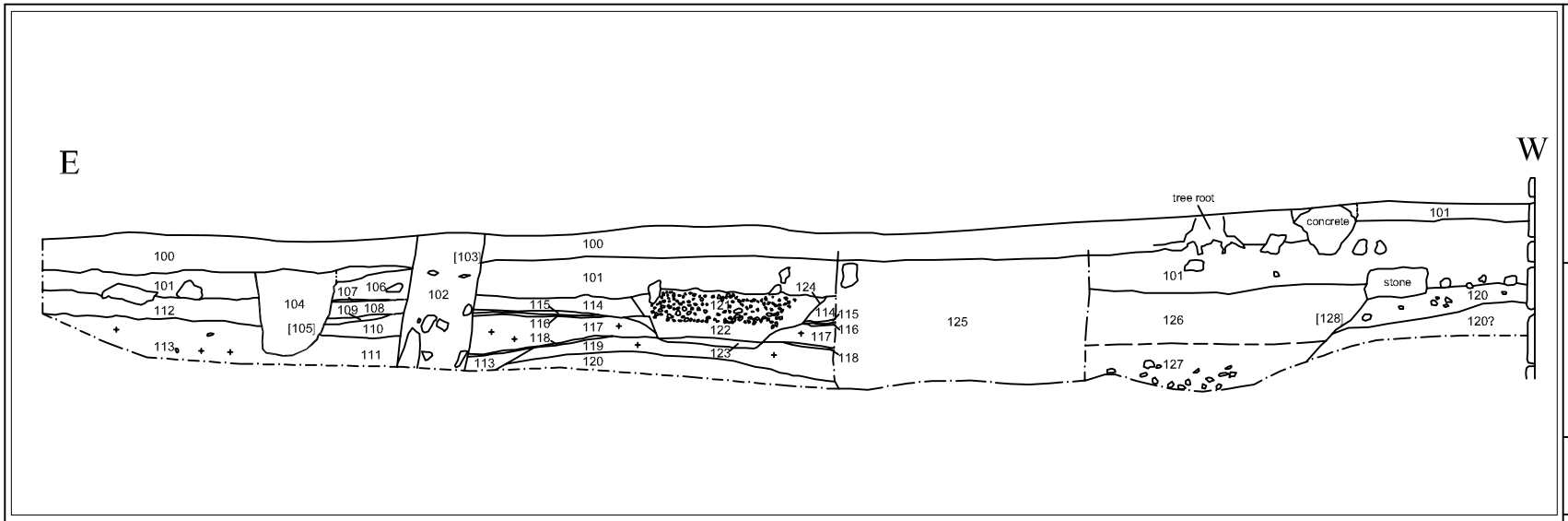
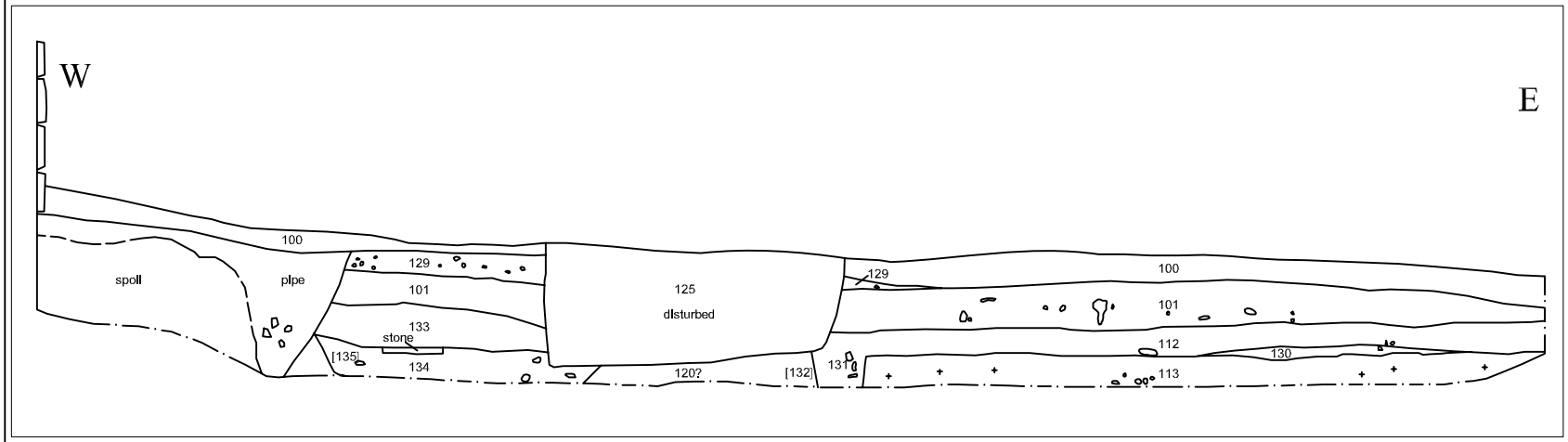


Figure 3: Location of Trenches 1-4 and the spoil heaps



North facing section of Trench 1



South facing section of Trench 1

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PROJECT:

Borrans Park, Ambleside

DRAWING No:

4

0 2m

Scale 1:25

DRAWN BY: AJP

DATE: October 2002

LOCATION:

KEY

Features
L.O.E
unclear boundaries
+ charcoal flecks

TITLE:

Sections through Trench 1

COMMISSIONED BY:

The National Trust

Figure 4: North and South sections in Trench 1

PLATES

